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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/387,555	09/01/1999	TOSHIYA TAKAHASHI	01489/P-2118	2734

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WASHINGTON, DC 20006

EXAMINER
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KLIMACH, PAULA W

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 03/29/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/387,555

Applicant(s)

TAKAHASHI, TOSHIYA.0

Examiner

Paula W Klimach

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 12, 13, 16-19 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 8, 16-19, 25-28, 32 and 33 is/are allowed.
- 6) ☒ Claim(s) 1, 9, 12, 13 and 29-31 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is in response to amendment filed on 12/16/03 (Paper No. 8). Original application contained Claims 1-24. Applicant added Claims 25-33, cancelled Claims 10-11, 14-15, and 20-24, and amended Claims 1-9, 12-13, and 16-19. Applicants also have made the appropriate adjustment to Claims 1-6, and 20 to overcome claim objection as identified in previous office action (Paper No. 6). The amendment filed on 12/16/03 have been entered and made of record. Therefore, presently pending claims are 1-9, 12-13, 16-19, and 25-33.

### ***Response to Arguments***

2. Applicant's arguments filed 12/16/03 have been fully considered but they are not persuasive because of the reasons set forth in this office action (Paper No. 9).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 12, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Slade (6,269,275 B1) in view of the article by Bober et al.

*In reference to claim 1, 12, and 13* Slade discloses a system for data processing and distributing, and therefore transmission of data objects (abstract and column 4 lines 28-57). The data objects can be stored in object memory (column 4 lines 23-27); thus the system outputs the data to a storage medium or a transmission medium (Fig. 1). The object data includes video

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and audio (column 5 lines 50-61). In addition the system disclosed by Slade encrypts at least object data corresponding to specified objects, which are predetermined among the plurality of objects. Slade discloses encrypting any of the objects; therefore the objects to be encrypted must be selected from the objects that are in the system (column 7 lines 65-67).

Although Slade discloses the use of MPEG4 standard (column 8 lines 43-49), Slade does not expressly disclose the plurality of object data composing a scene.

Bober discloses the details of the MPEG4 standard. Section 2.1 discloses that visual objects of MPEG4 and section 2.2 discloses the plurality of objects used to compose a scene.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the MPEG4 format as disclosed by Bober. One of ordinary skill in the art would have been motivated to do this because MPEG4 establishes universal, efficient coding of different forms of audio-visual multimedia data.

4. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Slade (6,269,275 B1) in view of the article by Bober et al.

Slade discloses a system for data processing and distributing, and therefore transmission of data objects (abstract and column 4 lines 28-57). The data objects can be stored in object memory (column 4 lines 23-27); thus the system outputs the data to a storage medium or a transmission medium (Fig. 1). The object data includes video and audio (column 5 lines 50-61). In addition the system disclosed by Slade encrypts at least object data corresponding to specified objects, which are predetermined among the plurality of objects. Slade discloses encrypting any of the objects; therefore the objects to be encrypted must be selected from the

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objects that are in the system (column 7 lines 65-67). Slade discloses the broadcast streams presented to the viewer (column 8 lines 20-24), therefore there exists a multiplexer for producing the multiplexed scene description and respective object data.

Although Slade discloses the use of MPEG4 standard (column 8 lines 43-49), Slade does not expressly disclose the plurality of object data composing a scene.

Bober discloses the details of the MPEG4 standard. Section 2.1 discloses visual objects of MPEG4 and section 2.2 discloses the plurality of objects used to compose a scene. Bober also discloses compressing the object data (section 2.2, 3.3).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the MPEG4 format as disclosed by Bober. One of ordinary skill in the art would have been motivated to do this because MPEG4 establishes universal, efficient coding of different forms of audio-visual multimedia data.

5. **Claims 29, 30, and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Slade (6,269,275 B1) in view of the article by Bober et al, and Spelman et al (5,638,445).

Claims 29, 30, and 31 are rejected as in the rejection for claim 9.

However, Slade, Bober, or do not disclose a system with secondary encryption of data before it is written to the reference memories and the restored data is subjected to decryption for decrypting the secondary encryption after it is read from the reference memory.

Spelman discloses a system wherein the data is re-encrypted (Fig. 1 part 30) before it is written to the reference memory (Fig. 1 part 20) and then it is subjected to decryption for

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decrypting the secondary encryption after it is read from the reference memory (data move from part 20 to part 40).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the method of re-encrypt disclosed by Spelman to re-encrypt the object data in the system of Slade. One of ordinary skill in the art would have been motivated to do this because it would make it possible to transfer data to a third party without the third party knowing the key belonging to the first party.

6. **Claims 2-6** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*In reference to claim 2* is allowable because it discloses encryption identifiers that are used to indicate whether or not an object has been encrypted. The identifiers are kept in the scene description data. The prior art discloses the use of scene description data, but does not disclose the scene description data that includes the encryption identifiers.

*In reference to claim 3* is allowable because it discloses control information required for encryption in the scene description data. The prior art is silent on control information for encryption being stored in the scene description data.

*In reference to claim 4* is allowable because it discloses the scene description data determining the objects that are going to be encrypted.

*In reference to claim 5* is allowable because it discloses control information that is required for encrypting the respective objects. The prior art is silent on the encryption of the objects being controlled by control information.

*In reference to claim 6* is allowable because it discloses control information required for encryption of the objects. The prior art is silent about control information used to control the encryption of objects.

***Allowable Subject Matter***

Claims 7, 8, 16-19, 25-28 and 32-33 allowed.

7. *In reference to claim 7*, is allowable because it claims, “encrypting includes encrypting, control information for a target object corresponding to object data to be encrypted according to control information for an encrypted object corresponding to previously encrypted object data, and adding encrypted control information to the previously encrypted object data.” The prior art discloses the encryption of any objects and therefore the selection of objects to be encrypted, however, the prior art does not disclose control information that is used to control the selection of object data that is to be encrypted.

8. *In reference to claim 8*, is allowable because it claims, “... control information for encryption.” The prior art is silent on information used to control the objects that are to be encrypted.

9. *In reference to claim 16-19, 25-28 and 33*, are allowable because the claims disclose determining whether the objects are encrypted or unencrypted. The prior art discloses the encryption of any object and therefore the selection of objects to encrypt, however the prior art is silent on the determination of objects that are encrypted or unencrypted.

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10. *In reference to claim 32*, is allowable because it claims, "limiting the display of the image such that an image based on the object data corresponding to each of the specified objects is prevented from being displayed individually, according to the scene description data." The prior art is silent on limiting the display of the image. The prior art discloses encryption of any object. Therefore the encrypted object may still be displayed in its encrypted form.

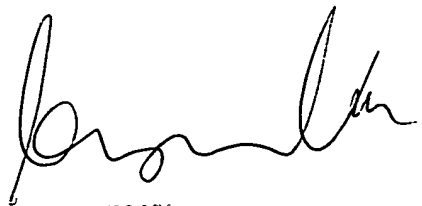
***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W Klimach whose telephone number is (703) 305-8421. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK  
Friday, March 19, 2004

  
PAULA W. KLIMACH  
EXAMINER  
COMMUNICATIONS SECTION  
MAR 19 2004